

PHILADELPHIA MEDICAL TIMES.

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ORIGINAL LECTURES.

CLINICAL LECTURE ON VENEREAL DISEASES.

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Delivered at the Charity Hospital, Blackwell's Island, New York,
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No. I.

GENTLEMEN,—I have two interesting cases to show you to-day. The first is a case of the primary lesion of syphilis in a woman, extremely well marked. The history of the case is briefly this. She cannot give the exact date of the appearance of the lesion, but she says it has lasted for seven weeks. The ulceration is extremely superficial, looking as though the epithelium merely was stripped off. It differs entirely in appearance from what we find in the *chancroid*. The edges are flush, and level with the surrounding surfaces; in the chancroid they are usually undermined. With the chancroid there is a large amount of secretion; with this, you see, it is slight.

There has been but little treatment in the case, the patient having been in the hospital about two weeks. You will notice that the so-called induration which surrounds the sore is extremely well marked. This induration is not a necessary accompaniment of the primary lesion, although when present it is of value. There are three different varieties which we recognize: 1, the Hunterian indurated chancre; 2, the parchment indurated chancre; and, 3, the erosiform indurated chancre. This latter variety has hardly any induration at all.

Another characteristic of this sore is its superficial character. There is no ulceration, in the true sense of the word. With the chancroid, you know that there is an actual loss of tissue; here there is little, if any. The period at which these ulcerations should make their appearance is from three to four weeks after the infecting coitus. In the large majority of cases it will be impossible to arrive at an exact date, especially in women: usually, it commences from the twenty-fourth to the twenty-sixth day after connection; sometimes later; occasionally, but very rarely, earlier. Those rare cases you will occasionally see, and it then sometimes becomes a nice point in the diagnosis to determine whether a given sore is chancroidal or syphilitic.

These primary lesions progress very slowly. In this case, our patient noticed a little papule which extended slowly, but, as it was during her menstrual period, nothing could be done for it. The ulceration has been larger than it is now. The primary lesion of syphilis has a tendency to get well if allowed to, oftentimes healing up in a few days; whereas the chancroid is inclined to spread.

With regard to the treatment of the primary lesion, the simpler it is, the better: merely local

dressing, separation of contiguous surfaces, and perhaps dusting over with a powder, will suffice; only in rare cases will cauterization be requisite. You are much more likely to irritate and keep up your sore from the use of the cautery, than if you let it alone. With regard to commencing treatment at once, there are various opinions,—some in favor, some against. I think it better to wait, for two reasons. In the first place, you are often unable to decide upon the character of the ulcer; and, knowing that mercury is absolutely injurious to chancroid, it is well to abstain until this point is settled by the appearance of the secondary symptoms. In the second place, giving the mercury *ab initio* will not prevent the appearance of subsequent lesions, but it does have the disadvantage of retarding them, sometimes for several weeks. You are then entirely abroad as to the nature of your disease, and in doubt whether to continue treatment or not. Another point: you do no harm to your patient by waiting, as the virus does not accumulate by delay, and therefore I say to you that the most simple treatment will very often be the best.

These lesions of syphilis are usually single, seldom multiple; while with the chancroid the opposite obtains. These lesions, moreover, are not auto-inoculable, the disease, as a rule, giving immunity from a second attack to the person the possessor of it. In making the attempt at auto-inoculation, you may get a small pustule, but this disappears in forty-eight hours. You do not get a new primary lesion; whereas in the chancroid you can perform auto-inoculation from the time of its appearance until the time of its cicatrization.

The next case I have to show you is one of chancroidal phagedæna, where the ulceration has run almost around the entire glans penis.

One word with regard to this phagedæna. It is not a constituent of either the chancroid or the primary lesion, but is a complication, and a serious one, denoting, as it does, a vitiated condition of the general health, either from some inherited taint, alcoholism, or other debilitating cause. You will sometimes find that as fast as it heals at one edge it extends in another; you then have what is known as a serpiginous chancroid.

This patient had gonorrhœa one year ago, and subsequently had a sore on his penis, which disappeared after treatment in a short time. The present sore appeared ten days after connection, and spread rapidly. Here you notice the short time which has elapsed between the appearance of the sore and the time of connection, differing in that respect from what takes place in the indurated chancre. In the next place, you see that there is quite an extensive ulceration along the base of the glans penis and beneath the sheath of the organ. The amount of secretion is also very abundant, and the edges of the sore, as you see, are ragged and undermined; indeed, at one point the ulcer has burrowed for quite a distance. In other words, a decidedly destructive process has been going on. Besides this, the entire organ is doughy and edematous. On handling the base of the ulcer we are struck at once

by the fact that it is perfectly soft, and devoid of the hard cartilaginous ring of induration which surrounds the primary lesion; and on inspecting the groin we find no indurated or swollen glands. These are points of much diagnostic importance, for the presence or absence of induration in the inguinal glands, as well as in the ulcer, marks the difference between the chancroid and the chancre, the simple non-constitutional venereal ulcer and the specific constitutional one.

This phagedæna is a complication of much consequence. It may attack both the primary lesion (chancre) and the chancroid, but is not a component of either, nor does it belong to one more than to the other. If it attack the syphilitic ulcer, it will carry off the induration; but still this does not change the character of the sore; subsequent symptoms will make their appearance, and usually in such cases they are likely to take on ulcerative action. In this case, the progress has been rapid; the ulcer has extended in less than a week, and burrowed beneath the skin of the penis and down the glans penis itself. The ulceration has that peculiar appearance which is found in these chancroids. It has an abundant secretion and undermined edges; and these edges are important in the treatment by cautery, for you must remember to cauterize not only the surface of the sore itself, but beneath the edges; otherwise, you may have to cauterize two or three times over, if you neglect this slight precaution. What is true in the treatment of the ordinary chancroid is doubly true here: destroy the ulcer thoroughly and quickly. But how are we going to get at it in order to cauterize it? Sometimes we are able to retract the prepuce; but in this case it is impossible to get it back, and then the next best thing to do is to inject a medicated solution beneath the prepuce, in order to cleanse and alter the character of the sore. Should this be impracticable, we might dilate the prepuce with pieces of sponge packed between it and the glans, just as we would an os uteri; and, if all these methods fail, then we may lay the ulcer open by a free incision. It is important to expose the sore thoroughly in order to cauterize it properly; and it is better to cauterize into sound tissue than to do it imperfectly. If you are compelled to resort to an incision, do not forget to cauterize the cut edges of the wound as well, otherwise they will become inoculated.

Before leaving the subject of chancroid, gentlemen, let us devote a few minutes to a consideration of their seat. It was for a long time believed that the head and face possessed an immunity against chancroid, and that any venereal ulcer seated upon these parts must be syphilitic. It is true that in a large proportion of cases such is the fact; but later research has shown that the chancroid may, and does, appear upon the lips, face, and other parts of the body.

There is an interesting case of this kind in the wards, where the ulcer, primarily seated upon the genitals, was inoculated upon the face, behind the ears, upon the body, hands, and wrists, by the patient himself, notwithstanding that he had been warned of the danger of auto-inoculation.

The primary lesion, unless complicated, as a rule, gets well rapidly. The chancroid, on the other hand, has a tendency to extend almost indefinitely, especially if it become phagedænic. In these ulcerations we have a period of incubation of only a few days at the most. In the primary lesion we have a period of incubation of several weeks. It may not always be easy to get exact dates, from the patient's uncertainty about it, but in the majority of cases you will find that the period of incubation in the syphilitic ulcer is from three to four weeks. The glandular induration, with the primary lesion, is rarely absent. Sometimes it is slight, sometimes well marked; whereas in the chancroid, generally, you have no complication of the inguinal glands whatever. When there is, the resulting bubo nearly always assumes the character of the sore itself,—*i.e.*, is chancroid; oftentimes undermining the tissues to an alarming extent.

Another point is the multiplicity of these lesions. Chancroids are often multiple; the primary lesion very rarely. The former is auto-inoculable, the other is not. Even if at the time of infection the chancroid be single, it nearly always becomes by-and-by a multiple sore,—that is to say, any abrasion of the skin is likely to become chancroid; whereas, with the primary lesion, the infection once given, the system is no longer susceptible to a fresh inoculation. German investigators have made the attempt to inoculate the bearer of the primary lesion with the secretion of the sore, with but little effect. All that has been done is this: the skin of such patients is usually irritable, and the secretion may produce a small pustule; but this pustule comes on very soon after the inoculation has been made, and disappears in a short time; showing, by the absence of all the diagnostic signs of the chancre, that it is a false lesion, so to speak. In the primary lesion the ulceration is superficial; it rarely goes deep unless it be complicated with something in the shape of phagedæna or gangrene. The presence of the induration is a valuable sign, but that may sometimes be absent; so that you have only the history of the case to guide you in forming your diagnosis. After it has lasted for some while, the chancre will sometimes assume a peculiar appearance; the floor of the ulcer becomes covered with an abundant crop of granulations, which spring up above the level of the surrounding tissues. Over these granulations will be spread, oftentimes, a thin film, looking not unlike mother-of-pearl, particularly when seated upon moist surfaces. If the primary lesion be seated upon parts exposed to the air, then you will sometimes find it covered over with a light crust. In other words, the chancre becomes converted into a mucous patch.

As a rule, an indurated chancre, after it has healed up, remains healed; but there are exceptions to this rule. It sometimes happens, especially if the induration has been extremely well marked and the cicatrization has been slow, that the chancre breaks out again without a fresh connection having been indulged in. Remember this, as otherwise you may think your patient is trying to deceive you.

ORIGINAL COMMUNICATIONS.

CLINICAL CONTRIBUTION TO THE SYMPTOMATOLOGY AND PATHOLOGY OF INTRACRANIAL TUMORS.

BY CHARLES S. BULL, M.D.,

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IN the *Times* for January 9, 1875, the writer reported a case of intracranial tumor with microscopic examination, which was somewhat rare as regards locality and symptomatology. The following cases are presented in detail for the sake of comparison with each other, and as a contribution to the symptomatology, prognosis, and pathology of the subject. It may now be said, with a certain amount of justice, that the physician should never be surprised at any variety of symptoms occurring in the course of a supposed case of intracranial growth. But there are a certain train of symptoms which we always expect to encounter in these cases. The histories of the following cases will show that the expected symptoms are sometimes wanting, and their place taken by others which obscure both diagnosis and prognosis, and leave us very much in the dark :

Case I.—A. C., æt. 50, Ireland, blacksmith. The patient has been an inmate of Charity Hospital several times during the past two years, suffering from asthma, chronic bronchitis, and emphysema. He was admitted for the last time on December 4, 1874, for a troublesome cough, with considerable expectoration and great dyspnoea. On physical examination, there were found the usual signs of chronic bronchitis and emphysema, and, in addition, hypertrophy of the heart. The man's face was constantly congested, and the extremities were cold, and almost livid. When he walked, his gait was tottering or waddling, resembling somewhat that seen in patients suffering from pseudo-hypertrophic muscular paralysis. There was no paralysis, however, of any muscle, and the cutaneous sensibility was perfectly normal. There was a moderate amount of deafness in the right ear, hearing-distance for the watch being $\frac{1}{10}$, but the man had chronic naso-pharyngeal catarrh, and a somewhat sunken membrana tympani, which would account for the deafness. There was no disturbance of vision, no strabismus or paresis of any of the ocular muscles, and the pupils were normal and reacted well. He remained in about the same condition till the last week in December, when he complained of pain and weakness in the lumbar region, became unable to sit up, lost his appetite, and his bowels became obstinately constipated. He next developed some obscure head-symptoms, fell into a drowsy condition, varied with low muttering delirium, from which, however, he could be aroused. He sank gradually away, and died on January 2, 1875, having been deeply cyanosed on the last day of his life. At no time were there symptoms of disease of the eye, though repeated examinations were carefully made with the ophthalmoscope. The day before his death, the pupils became widely dilated. A diagnosis had been made of a low type of meningitis.

Autopsy, thirty-three hours after death.—Bones of the skull normal. The vessels of the dura mater were filled with blood, and there were several points of adhesion between the dura mater and pia mater, on the right side, in the middle and posterior fossæ of the base.

The vessels of the pia mater at the base were engorged with dark blood. The subarachnoid space was very largely distended with fluid, as were also the meshes of the pia mater. The cerebral convolutions were flattened over the vertex, most markedly in the left middle lobe. The lateral ventricles were largely dilated, and filled with clear fluid. There were two or three circumscribed spots of meningitis at the base of the brain on the right side, in the middle fossa, near the median line, but there was very little solid exudation.

On the anterior and inferior surface of the right lobe of the cerebellum, underneath the pia mater, with attachment only to the vessels, was an oval, flattened, slightly nodulated and firm tumor, measuring two inches long, one-half inch broad, and one-half inch thick.

The growth projected into the internal auditory canal, pressed upon the right hemisphere of the cerebellum, the right side of the pons, right crus cerebri, and all the cranial nerves of the right side except the first, second, and ninth pair.

The lungs were emphysematous in the upper lobes, bronchitis all over both lungs, and general pleuritic adhesions. There was hypertrophy of the entire heart, dilatation of the right ventricle, but no valvular disease.

Remarks.—The above narrative is of a case of supposed meningitis, in which a cerebral tumor was unexpectedly stumbled upon at the autopsy, and which had manifested its presence during life by but a single symptom,—the staggering gait,—and this was not so marked as, in the absence of other symptoms, to be regarded as of special importance, and it was masked later in the disease by the symptoms of meningeal inflammation. Another interesting feature in the case was the encroachment of the tumor upon the internal auditory canal and its pressure upon the auditory nerve, which, of course, would account for the deafness. It seems singular that the pressure upon the third, fourth, and sixth nerves should have produced no phenomena in the muscles of the eye, which were carefully examined on several occasions, and found intact. Even the pupil was not affected until just before death. A microscopical examination of the optic nerve and retina revealed nothing abnormal.

The tumor proved, on examination, to be a sarcoma of mixed character, both small round cells and fusiform cells being found, though the former predominated. There was very little connective tissue in the growth, and very few blood-vessels. The tumor was circumscribed, and was entirely devoid of processes, with the exception of the one encroaching upon the internal auditory canal.

Cerebellar tumors are said to manifest themselves almost always by some affection of the optic nerve, either a neuritis descendens or "choked disk;" yet in this, both were absent.

Case II.—D. D., æt. 31, Ireland, coachman, admitted to Charity Hospital December 2, 1874.

The patient's mental condition was so much affected that no clear history could be obtained. The only fact of importance elicited was that about three weeks previous to his admission to the hospital his sight began to fail, and grew steadily and rapidly worse. The patient is a strong, finely-developed man, with dark complexion. His mind wandered at times, and it was difficult for him to concentrate his thoughts sufficiently to answer questions. His general health,

until recently, was perfect, but for about a month he had suffered from constant thirst and hunger, and marked diuresis. Vision was reduced to perception of light, and the pupils were moderately dilated and immovable. He drank an enormous quantity of fluid without quenching his thirst, and passed about three gallons of colorless, perfectly clear urine, which deposited no sediment. Its reaction was acid, specific gravity 1002-3, but it contained neither albumen nor sugar, though repeatedly examined. In the course of two or three days complete amaurosis set in, and he developed a slight muttering delirium at night, and later this came on in the daytime. Both eyes presented a typical case of "choked disk." The optic papillæ and retinae were enormously edematous and infiltrated with exudation from the vessels, which in many places were entirely concealed from view. The fundus of each eye was strewn with hemorrhages of varying size, some superficial, others deep in the tissue of the retina and papilla. The media were perfectly clear, the pupils immovable, and there was a slight tendency to ptosis. When spoken to, he always said he felt well, but complained of great thirst. He soon began slowly to emaciate, and incontinence of urine came on.

During the day he now developed an unsteadiness or staggering in his gait, and was also attacked with epileptiform seizures confined to one side, and at times affecting only the arm or the leg. These were infrequent and occurred at irregular intervals, rarely lasting more than a minute or two, and after them he fell into a semi-comatose state.

On the 18th of December he began to show some slight signs of improvement; his intellect became clearer, and he spoke more rationally. A diagnosis was made of intracranial tumor, probably at the base of the brain, and involving both optic tracts and perhaps the cerebellum; but it was difficult to account for the great diuresis, unless perhaps the fourth ventricle was involved in the disease. His improved state lasted till the last of December, when he grew worse again; but there was no further return of the convulsive movements of the limbs. On January 16, 1875, a divergent squint of the left eye made its appearance, due to paresis of the internal rectus muscle. His pulse and temperature were taken twice daily, but his temperature never went above 100°, and averaged 98°; and though his pulse occasionally reached 115, yet it soon fell, and did not average above 92.

The process in the eyes went on rapidly to atrophy of the optic nerves, the exudation disappeared, the hemorrhages were absorbed and did not recur, and on the 10th of February the optic papillæ presented the picture of advanced atrophy, their edges sharply defined, the arteries reduced to threads, and the color a brilliant white.

The patient's condition again improved; the emaciation ceased, his appetite became less voracious, and, although he complained of the same devouring thirst, yet the amount of urine voided was somewhat less in quantity. His intellect became clearer; he left his bed and got up, and declared he felt perfectly well but for his blindness.

The treatment in the above case was mainly tonic and restorative, with potass. iodid. in large doses three times a day. On the supposition that the administration of this drug might be influencing the diuresis, it was discontinued; but there was no diminution in the amount of urine voided, and it was therefore again administered.

Are we to suppose that the potash had exerted its absorptive powers on the growth, and caused its gradual diminution or disappearance? or was the

diagnosis faulty? Authorities would have us believe that "choked disk" is always caused by an intracranial growth, and in accordance with this dictum the case must be ranked in this class. But, resting our knowledge on the results of pathological investigation, can we assert that patients may recover from intracranial growths?

Such a case as the one just cited is of great interest so long as the man lives, but just so long does it remain an enigma, the solution of which we can only attain by an autopsy.

Case III.—T. R., æt. 6, a well-developed, bright boy, was admitted to the N. Y. Eye Infirmary, October 12, 1874. About three months before, the boy had received a severe blow on the right temple from a bat, which made a ragged wound about two inches long. He was felled to the ground, lost a great deal of blood, and remained unconscious for nearly forty-eight hours. He recovered, however, and nothing wrong was noticed in his intellect or vision. One week later he fell from a wagon, and struck on the same temple; the old wound was reopened, and again a profuse hemorrhage was the result. When he recovered consciousness, he complained of violent headache, nausea, and vertigo, which lasted almost constantly for four weeks. Since then the nausea and vertigo have disappeared, and the headache has been very slight and inconstant. One week before I saw him the mother noticed that he could not see well, and that he fell over the furniture in the room, and could not find the door.

An examination showed moderately dilated pupils, which reacted well to light, freely movable eyeballs, and no squint. An ophthalmoscopic examination showed an extremely well-marked example of "choked disk" in both eyes. The outlines of the papillæ were entirely lost, the veins immensely engorged and distorted, a mass of exudation on both disks and into the retina immediately around them, and in the region of the macula a peculiar yellowish-white, glistening exudation, arranged in the radiate or stellate form so characteristic of retinitis albuminurica. On questioning the mother, she said the child had of late passed a good deal of dark-colored urine. A specimen was examined at once, but no albumen or casts found. The urine was examined at every visit, but nothing abnormal was ever found. Vision was reduced to perception of light.

October 14.—The child appeared heavy and stupid. Some minute extravasations of blood on the right optic disk. From the history, a diagnosis was made of basilar meningitis, although the presence of "choked disk" would seem to indicate an intracranial tumor. There is no interference in the function of any of the other cranial nerves, and not a sign of any disturbance in the cerebellar functions.

October 16.—The child has lost the dull, stupid look, and seems bright and intelligent, though somewhat quiet. The right optic disk shows signs of atrophy, the exudation is being absorbed, and the arteries seem smaller in size. From this time on the atrophic process went on rapidly; the hemorrhages became absorbed, the exudation into the retina and optic nerve disappeared, the papillæ regained their clearly-defined outlines, and the arteries became almost thread-like in size. The exudation in the region of the yellow spot, however, remained unchanged, and is probably of the same nature as that met with in retinitis albuminurica, viz., a fatty degeneration of the retinal tissue.

The treatment was carefully followed out, but proved of no avail. It consisted in repeated blisters behind the ears and to the nape of the neck, leeches to both temples, potass. iodid., six-grain doses three times a day, gradually increased to gr. xv three times a day,

and atropine instilled daily. After the inflammatory process had subsided in the nerves, resort was had to strychnia, with the faint hope of staying the atrophic process, and one-sixtieth grain was injected hypodermically every day, and gradually increased up to one-thirty-sixth grain, without producing any favorable result, and here we were obliged to discontinue it, as it began to produce the toxic effects. The boy was seen at irregular intervals up to January 15, 1875, and at the last visit the atrophy was complete, the amaurosis was total, and the pupils were widely dilated. The boy's health was perfect, and he was growing rapidly.

Remarks.—This case showed some interesting points. If the pathological process within the skull were a meningitis, it seems very strange that it did not produce any constitutional disturbance. Except during the two days of unconsciousness immediately following the accident, the child was not sick, and complained only of headache and occasional vertigo. Yet there was an active process of some sort going on within the skull when he was brought to the Infirmary, as was proved by the ophthalmoscope.

It could scarcely have been a tumor within the brain, for the lesion followed the accident too closely. Hemorrhage following the accident might have given rise to the signs of intracranial pressure indicated by the "choked disks," but it would also have caused other morbid phenomena of a paralytic nature, none of which were present.

In view of all the facts, it seems possible that there might have been a slight fracture at the base, perhaps produced by contre-coup, which had set up a localized meningitis, and the exudation, whether serous or otherwise, had pressed upon the chiasm or optic tracts, or perhaps upon both ophthalmic veins, though the former supposition is the more probable. From whatever aspect considered, the diagnosis is one of some difficulty, particularly in view of the recovery of the patient.

NEW YORK, March 20, 1875.

A CASE OF ACUTE PHTHISIS.

REPORTED BY GEORGE S. GERHARD, M.D.

THE following notes of a case in the service of Dr. James H. Hutchinson I publish by his permission.

Thomas McG., æt. 21, a native of Boston, and a book-canvasser by occupation, was admitted on February 19, 1875.

He stated that he was taken on the 9th inst., after an exposure while on a debauch, with a feeling of malaise, followed on the evening of the same day by a chill and fever, and on the following day by cough and mucous expectoration, but not by pain in the chest.

His previous health had always been good, and no history could be obtained of his ever having before suffered from any form of chest-disease. He also presented a good family history. His habits had been for some time intemperate, but he had never suffered from venereal disease.

When he was admitted, he had fever, a furred but moist tongue, and cough, accompanied by mucous expectoration. He did not complain of pain in the chest, and there was no marked dyspnoea and no blueness of the lips. There was a good deal of muscular trembling and general prostration, but the patient's mind was perfectly clear. Examination of the chest revealed slight

dulness anteriorly in the left infra-clavicular region, with increased vocal fremitus, and, posteriorly, impairment of resonance over the whole right lung, but the vocal fremitus was somewhat more marked on the left side. Auscultation revealed fine and coarse friction-sounds, and a good many subcrepitant râles both anteriorly and posteriorly, but the latter were especially numerous in the left infra-clavicular region. The heart-sounds were normal. The urine was free from albumen.

He was ordered quiniae sulph., gr. j; pulv. ipecac. comp., gr. ii; potass. nit., gr. v; pulv. digital., gr. $\frac{1}{2}$; q. t. h.

On the 20th the muscular trembling had increased, and two ounces of whisky daily were ordered. A.M., temperature 102°, respiration 30, pulse 96. P.M., temperature 104°, respiration 30, pulse 106.

On the 21st, dulness in the left infra-clavicular space persists, and there is blowing respiration in this region, but the other chest-signs remain unchanged. The patient's cough is growing more troublesome, but his expectoration is still bronchitic in character; there is some substernal soreness, but there is no localized pain in the chest, and no pain on full inspiration. Whisky increased to $\frac{1}{2}$ oz. A.M., temperature 100°, respiration 30, pulse 94. P.M., temperature 103 $\frac{1}{2}$ °, respiration 30, pulse 94.

On the 22d, A.M., temperature 100°, respiration 36, pulse 86; P.M., temperature 103°, respiration 36, pulse 96.

On the 23d, A.M., temperature 99 $\frac{1}{2}$ °, respiration 36, pulse 96; P.M., temperature 103°, respiration 36, pulse 100.

On the 24th, A.M., temperature 101°, respiration 36, pulse 100; P.M., temperature 101°; respiration 36, pulse 100.

On the 25th the percussion-note at the left apex is dull and somewhat tympanitic in quality, and the râles are coarse and more numerous; posteriorly, there is no marked dulness on either side, but the râles (friction and subcrepitant) are still heard. The patient is very pale and weak, but he takes his nourishment well, and is not delirious. A.M., temperature 99°, respiration 36, pulse 86; P.M., temperature 101°, respiration 36, pulse 96.

On the 26th, cough very troublesome, and the expectoration is now viscid and streaked with blood; dyspnoea increasing, and the lips and nails are bluish, but there is no marked hectic disturbance. The whole left chest is dull on percussion posteriorly, and the subcrepitant râles are very numerous.

The chest was ordered to be dry-cupped. A.M., temperature 101°, respiration 42, pulse 104; P.M., temperature 102°, respiration 36, pulse 96.

On the 27th, slight delirium last night, but mind clear this morning. Dulness over left chest, posteriorly, unchanged; respiration distinctly bronchial in the infra-clavicular region and elsewhere; on the left side it is very harsh, and accompanied by friction and coarse crackling; there are also a good many râles on the right side. Lips decidedly cyanotic; tongue furred, but moist; no nausea or vomiting; bowels confined. Stimulus increased to $\frac{1}{2}$ oz. Powders stopped, and mixture ammon. carb. and infus. digital., $\frac{1}{2}$ oz every alternate two hours ordered. A.M., temperature 102°, respiration 36, pulse 96; P.M., temperature 102°, respiration 48, pulse 114.

On the 28th, percussion anteriorly on left side is of higher pitch and more tympanitic in quality; indeed, below the clavicle there is amphoric resonance and cracked-pot sound. Posteriorly, there is dulness on both sides, but it is especially marked on the left. A.M., temperature 101°, respiration 48, pulse 96; P.M., temperature 102 $\frac{1}{2}$ °, respiration 40, pulse 106.

On March 1, A.M., temperature 101° , respiration 42, pulse 100; P.M., temperature 103° , respiration 42, pulse 104.

On the 2d, A.M., temperature 101° , respiration 42, pulse 94; P.M., temperature 102° , respiration 42, pulse 100.

On the 3d, dyspnoea still more marked, and lips and nails very cyanotic; patient talks a great deal during sleep; pulse very feeble, and somewhat dicrotic; occasional sweating; cough and expectoration unchanged. Dulness greater on the right side posteriorly to-day; other signs as before.

On the 4th, increasing prostration; tongue brown and dry. A.M., temperature 100° , respiration 42, pulse 100; P.M., temperature 102° , respiration 36, pulse 94.

On the 5th, patient very delirious last night, and this morning there is marked mental hebetude and intense prostration. Amphoric resonance on left side anteriorly exceedingly well pronounced to-day.

On the 7th, moribund.

On the 8th, patient died at 2 o'clock this morning.

At the autopsy, which was made fourteen hours after death, the following note was taken. Body much emaciated; rigor mortis well pronounced. The left pleural cavity contains a considerable quantity of serous effusion, and at the base of the lung there are a few adhesions. There is also some effusion in the right pleural cavity, but it is smaller in amount, and of a darker color. There is no enlargement of the mediastinal glands. The left lung is solidified from apex to base by diffused caseous infiltration, and here and there cavities are found, but none of them are larger than a marrowfat pea. Scattered throughout the lower half of the lung there are numerous gray granulations (miliary tubercles). The same granulations are found in the right lung, but they are more uniformly disseminated, and are associated with comparatively few cheesy deposits. The tissue of the right lung is everywhere congested and of a dark color, but it is generally crepitant. There are no excavations in this lung. Heart and abdominal organs healthy. Careful examination of the brain and its meninges fails to reveal the presence of tubercles.

Remarks.—When the patient whose history is given above was admitted into the hospital, the physical signs presented were those of diffused bronchitis, with extensive plastic pleurisy. There was no decided dulness on percussion in any part of the chest, excepting at the apex of the left lung, and the general symptoms could all be accounted for by the physical signs. The persistence, however, of the physical signs, and the increasing dyspnoea and constitutional depression, soon led Dr. Hutchinson to conclude that he had a case of acute phthisis to deal with. The development of tuberculosis was undoubtedly of secondary occurrence, and was probably coincident with the increase of dyspnoea and of other symptoms of deficient aeration of the blood.

There are several points of interest in connection with the physical signs presented by this case, such as the shifting dulness at the posterior part of the chest, and the very remarkable tympanitic quality of the percussion-note on the left side anteriorly. The shifting dulness posteriorly was, of course, dependent upon congestion changing from one side to the other, according to the patient's decubitus; but the peculiarity of the percussion-note in front cannot be so readily explained.

The tympanitic resonance became marked a few

days after the patient's admission, and shortly before his death it exactly resembled that of pneumothorax. The left lung, as will be seen from the notes of the post-mortem examination, was generally solidified, and contained a good many minute excavations, but there was no evidence of there having been air in the pleural cavity.

I have frequently been surprised, in percussing over the anterior part of a pneumonic lung, to find a clear but high-pitched sound brought out, and this in cases where the lung was solidified throughout; but I have never before met with an instance in which there was amphoric resonance in connection with consolidation. It would have been quite impossible, in a case like the present one, to have diagnosed the development of tuberculosis. The temperature-record shows a marked evening exacerbation, which is usual in acute phthisis, but the reverse of what happens in acute tuberculosis, and the general symptoms might all have belonged to the former disease. That these two diseases are essentially distinct, and that a differential diagnosis can be made, I think any one may be convinced of by reading the report of two very interesting cases by Dr. Hutchinson, in the *Medical Times* for March 1, 1872. In the one disease there is an acute alveolar catarrh, the products of which undergo rapid caseous metamorphosis and lead to destruction of the pulmonary substance. In the other there is a sudden development of miliary tubercles in the lungs, followed by an active catarrhal process, and occasionally, though less frequently than in acute phthisis, by pulmonary excavations. Both diseases run a very rapid course; but this is particularly true of acute tuberculosis, which has been known to terminate in two weeks. In regard to the differential diagnosis of the two diseases, the points of distinction that are especially prominent are those relating to the temperature-records and the relation that the general symptoms bear to the physical signs. The temperature is considerably elevated in both, and a daily exacerbation takes place in both, but, as already stated, it occurs in acute phthisis in the evening, and in acute tuberculosis in the morning. The general symptoms of acute phthisis may nearly always be accounted for by the physical signs, but the two are markedly disproportionate in acute tuberculosis; so much so that it is frequently confounded with other acute diseases, particularly typhoid fever.

As an instance of this great disproportion between the two sets of symptoms, I may mention the following case:

In June, 1874, a colored barber, 22 years of age, whom I had been in the habit of seeing frequently, and of whose previous history I therefore knew something, consulted me in regard to a slight dry cough, and a feeling of malaise, accompanied by loss of appetite and so-called biliousness. I examined his chest, but was not able to detect any abnormal sign, and finding, on inspection of the throat, that there was a good deal of follicular enlargement, I concluded that this was the cause of the irritative cough, and that it was connected with the symptoms of constitutional depression.

I prescribed for him accordingly, but a few days afterwards he again came to see me, and I was at once struck with his altered appearance. He had high fever, and was so weak and was suffering so much from dyspnoea that he could scarcely cross the room without fairly panting for breath. His cough had also somewhat increased, but it was still unaccompanied by expectoration. Examination of the chest revealed universal enfeeblement of the respiratory murmur, but there was no dulness anywhere, and there were no adventitious sounds to be heard. The case, of course, resembled very closely one of typhoid fever, but, taking into consideration the absence of intestinal symptoms and a known hereditary predisposition, I diagnosed acute tuberculosis. He was removed to the country, and died eight or nine weeks after the commencement of his illness. No autopsy was made, but, from what I afterwards learned of the progress of the case, I feel sure that the diagnosis was a correct one.

ON THE MISINTERPRETATION OF APPEARANCES UNDER THE MICROSCOPE.

BY CHARLES STODDER, Esq.,
Boston, Massachusetts.

Read before the Biological and Microscopical Section of the Academy of Natural Sciences, and recommended for publication in the Philadelphia Medical Times.

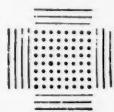
ALL text-books caution novices against misinterpreting what they see, or think they see, in their microscopes. Experience teaches that the caution is needed even by many who have long used the instrument. Objects viewed by transmitted light are seen under such different conditions, and the light received by the eye has been subject to such entirely different influences, from those that affect ordinary vision; that these conditions and influences must be carefully considered in forming any conclusion of the structure of the object studied.

A thin, plain plate of any homogeneous substance, such as silica or glass, is as invisible as air. Let the plate be curved or corrugated, or vary in thickness, and it becomes visible. Why? Not from any change in its nature, but because of its action on light. It both reflects and refracts; consequently, different and varying intensities (and colors, unless homogeneous light is used) reach the eye, and thus render visible the corrugation or inequalities of the thing under investigation. Every particle of matter not absolutely opaque acts on transmitted light as a lens, or prism, or group of minute prisms, no matter what its size or shape. Every one of the most minute specks of matter acts as a lens, and presents to the eye, under a certain magnification and focal adjustment, the appearance of a dot, bead, or spherule. The combination of two curved surfaces will act as a lens, and show beads where none exist in nature. This fact I announced many months ago. I send with this for the Section a slide of diatoms, from Bodington, Maine, among them numerous *Pinnulariæ* of several species (so called). Occasionally two frustules will be found lying across

each other, the costæ of one crossing the other at some angle. I have made (in my unskilful way) a sketch of one such instance, to which I will call your attention. The costæ are smooth and clean. Wherever those of the two frustules intersect each other (at nearly a right angle) we see rows of distinct, apparently spherical beads, but the evidence presented in the four directions on every side is conclusive that no beads exist there,—that what we actually see are "ghost beads;" an optical effect, and the result of the passage of light through a transparent refracting medium with curved surfaces. Numerous other examples similar to this are to be found on this slide.

Now, does not this present strong evidence that the so-called beadings seen in scales of insects, about which so much has been written, are also optical effects? So, too, of the "beading" of many of the diatoms.

Dr. Woodward, of Washington, has made a photograph of *Surirella gemma*, showing the whole surface broken up into beads, or dots,—an appearance that can be obtained by proper management of the illumination, but which is not the true resolution. E. Hartnack published, a few years ago, his idea of this diatom, derived from his use of his very high powers. He described the appearance as "flat hexagons." It is scarcely possible to conceive that he could have taken Dr. Woodward's beads for hexagons; so it is only a reasonable inference that he (H.) saw something else. It is well known of that diatom that between the strong, sharply-marked costæ there is a set of fine transverse lines; but crossing these at right angles is a set of very fine longitudinal striae, which can be seen only with a good instrument and with very careful management of the illumination. When these are in sight the transverse lines are *absolutely invisible* with the very best glasses; and with the best it can be demonstrated that Hartnack's "flat hexagons" have no existence, and were a theoretical explanation. The longitudinal striae are not continuous, but interrupted at frequent intervals. This may be owing to the inequality of the surface of the plant. I explain the appearance of the dots or beads as caused by the intersection of the two sets of striae on different planes with each other, so illuminated that the light is partly received from each. If true beads existed as represented in the photograph, it is difficult to conceive of any illumination that could cause them to disappear. The study of other genera of the Diatomaceæ only confirms me in this opinion. *Navicula cuspidata* Kutz is a well-known form, described as having "very fine transverse striae." My friend and correspondent J. E. Smith, of Ashtabula, Ohio, discovered that this species has exquisitely fine longitudinal lines also. By certain illumination this may be made to show "dots." Examined with a one-fiftieth, I demonstrated conclusively that the two sets of striae are on different planes, either of which could be brought into focus *without the other*. That there are a vast number of species of diatoms with true "beads," I admit.



I send a slide from mud bottom of Great Herring Pond, Cape Cod, obtained several years ago by officers of the United States Coast Survey. This material supplies an abundance of Stephanodiscus Niagarae Eh.,* first found by Prof. J. W. Bailey at Niagara Falls. This species presents fine examples of true dotted or bead structure, and the contrast is very great (under a high power and good definition) with the optical beading, though under other conditions, and without warning, the differences are easily overlooked.

Too many histologists have a poor opinion of the study of diatoms; but errors in the interpretation of their appearances illustrate the errors that may, and do, occur in the study of other subjects, while, so far as is yet known to science, the Diatomaceæ afford by far the best material known for the study of the instruments. The lenses that will best show the most minute structure of a diatom may, *a priori*, be taken to be the best to exhibit the most minute "lines and dots" that make up the aggregate of all structures; and I believe the experience of histologists who have used a large variety of instruments will confirm this. The one who has used only a very few lenses in the course of years, though he may be most accomplished in his own specialty, and be able to do more and better with his own lenses than any one else can with them, is not competent to make comparisons or judge of the value of other lenses in his own work, until he has actually worked with them.

TRANSLATIONS.

ACTION OF ESERINA IN CHOREA.—Dr. E. Bouchut (*Bull. Gén. de Théráp.*, April 13) records the results of four hundred and thirty-seven observations upon the action of eserina (the active principle of calabar bean), particularly in the chorea of children.

He finds that this alkaloid, while diminishing muscular contractility, augments that of the smaller vessels. It may be employed hypodermically or by the stomach, and should be given fasting. It may be given hypodermically in the dose of one-twentieth to one-twelfth of a grain, and, as its effect only lasts one to three hours, the dose may be repeated until one-fourth to one-third of a grain is given in twenty-four hours.

The effects of eserina are observed within a few minutes from its administration, and these are constant in the dose of one-twentieth to one-twelfth of a grain. It usually produces paleness, with contraction, occasionally followed by diminution of rate in the pulse. Nearly all the children to whom eserina was administered experienced malaise, burning pains in the epigastrium, with gastralgia, nausea, and rejection of stringy sputa.

Eserina occasionally causes bilious vomiting; it does not modify the temperature sensibly. In the doses above mentioned, eserina never produces colic or diarrhoea. Given internally, it usually produces no effect upon the pupil. It frequently causes profuse perspiration of the face and body. Paresis, and occasionally transitory paralysis of the diaphragm, are among the most serious and painful phenomena produced by this remedy.

* This same diatom is also abundant in the Toome Bridge, Ireland, deposit (fossil?), though the books do not mention that it has ever been found in Europe.

When the action of the eserina is spent, the patients return to their normal condition, and the substance does not seem to have any consecutive effect. It is not found in the urine, at least after administration in these small doses. Given in chorea, eserina arrests the movements while its effects last, and moderates them little by little in the intervals, so that this disease is cured, on the average, in about ten days. The effects of the remedy are more certain when it is given hypodermically.

Dr. Bouchut has never seen tremor or convulsions produced by the use of eserina, and thinks it probable that these symptoms are not likely to be brought on unless where the remedy has been employed in large and toxic doses.

X.

OPERATIVE PROCEDURE FOR THE EXTRACTION OF TUMORS OF THE MAXILLARY SINUS.—Dr. Armand Després remarks (*Bull. Gén. de Théráp.*, April 15) that no rule has ever obtained in operations upon this portion of the body, each surgeon following that plan which has seemed most fitting in any given case. After giving the methods of several surgeons for opening the sinus to extract an exostosis, Dr. D. gives the following as performed by himself:

An incision is made, extending from the inner angle of the eye at the insertion of the orbicularis tendon down the side of the nose, following the contour of the ala, and, when the naso-labial sulcus is reached, extending downwards along this to its termination, care being taken not to penetrate the mouth. The bone is then laid bare, the periosteal-cutaneous flap being carried back until the malar tuberosity is attained.

The ascending process of the maxillary bone is then divided, by means of cutting-forceps, from the edge of the nasal fossa to the lacrimal sac. Then the anterior wall of the maxillary sinus is divided by transverse incision, just under the malar bone. Raising the bone then, by the aid of a lever, it breaks off on a level with the edge of the orbit and the malar tuberosity. The bony fragment, pentagonal in shape, is then removed, and the tumor, which may be easily gotten at, is removed, either whole or piecemeal, according to its size. The cutaneous incisions cut the nasal branch of the facial artery, and the suborbital artery; they may be ligated if it is thought desirable, but simple pressure often serves to arrest the hemorrhage. There are no other difficulties in the process; section of the bone with the cutting-forceps is easily performed, and pressure causes it to break evenly at the diseased point. Silver wire sutures may be used alongside the nose and at the ala, while the twisted suture is to be employed to unite the naso-labial sulcus. Illustrations are given by Dr. Després, showing the very slight scar which remains subsequent to the operation.

GALVANO-CAUSTIC TREATMENT OF NEW GROWTHS, ETC., IN THE AUDITORY MEATUS.—Dr. L. Grossmann contributes a series of papers on this subject to the *Wien. Med. Presse* (Nos. 11, 12, 14, and 15, 1875). He believes this method to be much better than either of those formerly in use—the knife or caustic—for the removal of fibrous polypi in the external auditory meatus. Perforation of the tympanum by this method is also, Dr. G. thinks, preferable to either myringotomy or myringectomy, since an opening can be made as large as is desired, with such rapidity as to cause almost no pain.

This operation presents peculiar advantages for the removal of foreign bodies from the external meatus when the usual means, by a stream of water, etc., have failed. In addition, loss of blood and the effects of reaction are also avoided. The pain caused by the glowing wire is not so great nor so lasting as that experienced in operations by the knife.

Finally, it is possible to reach by the galvano-caustic wire localities which cannot be attained by other instruments, and the wound made by this requires no subsequent dressing.

X.

CRAMP OF TELEGRAPH-OPERATORS.—M. Ominus contributes an observation on this affection to the *Gaz. Méd. de Paris*, April 10. After alluding to the cramp due to repeated movements of certain muscles, and observed not only among writers but also among designers, engravers, and musicians, he gives a case of a similar character occurring in a telegraph-operator.

The patient, who had used the Morse instrument for nineteen years, first noticed a difficulty in making the dots, and especially a succession of dots. The first letters which he found difficulty in forming were *l*, which is indicated by three dots, *i*, which is indicated by two dots, and *u*, which is indicated by two dots and a line. *D*, which is formed by a line and two points, he found easier, because the first movement finishing the line gave greater assurance of movement. Soon it became impossible to make dots at all by the ordinary manipulation, and the patient then had recourse to his thumb, which he used for two years. At the end of that time the thumb was seized with cramps, and he then had recourse to the index and medius successively. Each of these was used two or three months, and then became useless on account of cramp. Even the use of the wrist, which he finally resorted to, gave rise to trembling in the fore-arm, and at last to the same symptom in the leg of that side, as well as pain in the neck, and sometimes vertigo and insomnia. The only method of relieving these symptoms is to change the instrument employed, using that known as Hughes's, and alternating this with Morse's.

X.

THERAPEUTIC NOTES.

IN RHEUMATISM.—

R Trimethylamini, $\frac{W}{4}$ v ad $\frac{W}{4}$ vij;
Syr. zingiberis, $\frac{3}{4}$ i;
Aq. menth. pip., $\frac{3}{4}$ i.—M.

Take at intervals of one to three hours until pain is relieved.

FORMULA FOR THE ADMINISTRATION OF CROTON-CHLORAL HYDRATE.—

R Croton-chloral., gr. xxx;
Glycerinæ, $\frac{3}{4}$ ss;
Ext. glycyrrhiz., $\frac{3}{4}$ i;
Aq., et syr. simpl., $\frac{2}{3}$ iss.—M.

Tablespoonful *pro re nata*.

PILLS OF THE ABOVE.—

R Croton-chloral.,
Pulv. glycyrrhiz.,
Confect. rosarum, $\frac{2}{3}$ gr. xv.—M.

Ft. in pil. no. xx.

IN PITYRIASIS.—

R Ol. theobromæ,
Ol. ricini,
Ol. amygdalæ, $\frac{2}{3}$ v;
Hydrarg. sulphat. flav., gr. xv.—M.

LOTION IN ERYSIPELAS.—

R Camphoræ,
Acid. tannic., $\frac{2}{3}$ i;
Etheris, $\frac{3}{4}$ i.—M.

Bathe the parts adjoining the diseased skin every two or three hours, or oftener.

DIARRHœA MIXTURE.—

R Olei ricini, $\frac{W}{4}$ xiv;
Sp. chloroformi, $\frac{3}{4}$ ss;
Sol. morphia mur., $\frac{3}{4}$ i;
Pulv. gum. acaciæ, $\frac{3}{4}$ ss;
Syrupi, $\frac{3}{4}$ ss;
Aquæ, ad $\frac{3}{4}$ iv.—M.

A dessertspoonful every hour and a half until the bowels are quieted.

PURGATIVE IN DYSPEPSIA ACCOMPANIED BY CONSTI-TUTION.—

R Mass. hydrarg.,
Ext. colocynth. comp., $\frac{2}{3}$ gr. xxx;
Pulv. ipecac., gr. iii.—M.

Ft. in pil. no. xii.

Two of these are to be taken every second or third night, and followed by a Seidlitz powder the next morning.

CHLORAL SUPPOSITORIES.—The production of a chloral suppository containing a sufficient proportion of this drug to cause sleep has heretofore been deemed impossible. M. H. Mayet, pharmaciëen, of Paris, has, however, devised the following formula, by which he manages to get forty-five grains of chloral in each suppository:

R Ol. theobromæ, gr. xxx;
Cetacei,
Pulv. chloral., $\frac{2}{3}$ gr. xlvi.

For one suppository.

These suppositories are of good consistence, and may be easily put into use.

INJECTION FOR CYSTITIS.—

R Sodii hyposulphit., $\frac{2}{3}$ iv;
Aq. destillat., lb. i, $\frac{3}{4}$ iv.—M.

This solution may be employed in five injections, in chronic catarrh of the bladder, when there is pain and the carbolic acid injection cannot be employed.

LOCAL ANÆSTHETIC.—

R Pulv. camphoræ, $\frac{3}{4}$ ss;
Ætheris sulph., $\frac{3}{4}$ v.—M.

Rub into the skin for a few moments at the locality where it is desired to produce anæsthesia.

IN DIPHTHERIA.—

R Pulv. cubebis,
Aq. menth. pip., $\frac{2}{3}$ v;
Syr. aurantii flor., $\frac{3}{4}$ vii;
Aquæ, ad $\frac{1}{2}$ iv.—M.

One or more tablespoonfuls for an adult, every three or four hours.

ANTI-GASTRALGIC DROPS.—

R Tinct. nucis vomicæ,
Tinct. castorei, $\frac{2}{3}$ ss.—M.

Two drops during the paroxysm, in half a wineglass of infusion of chamomile.

CAMPHOR OINTMENT.—

R Pulv. camphoræ, gr. xv;
Glycerinæ, q. s.;
Axungiæ, $\frac{3}{4}$ i.

Useful in erythema and in vesicular and squamous affections of the skin.

GARGLE IN SYPHILITIC ULCERATIONS.—

R Hydrarg. chlor. corros., gr. ii;
Glycerinæ, $\frac{3}{4}$ iv;
Aquæ, ad $\frac{1}{2}$ viii.—M.

PHILADELPHIA
MEDICAL TIMES.
A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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SATURDAY, MAY 15, 1875.

EDITORIAL.

OWING to the length of the letter which we print from our correspondent at the meeting of the American Medical Association, we lessen to-day our usual quota of editorial matter.

THE meeting of the American Medical Association just closed appears to have been socially a very successful one, there having been a large number of delegates in attendance, and a universal spirit of fraternity and good feeling having prevailed. The presence of a large delegation from Boston was a novel and praiseworthy event. This delegation, we happen to know, went home in a state of great satisfaction with their trip; so that it is to be expected that the effort of our Eastern brethren will not be a spasmodic one, but that hereafter New England will always be well represented. The delegation from Philadelphia was, unfortunately, a small one; but, as it was headed by Dr. Gross, it played a fairly prominent part in the sessions of the Association.

WE notice in this week's Chicago *Examiner* "The New Scriptures according to Tyndall and Others," taken from the Canada *Lancet*. The travels of this *jeu d'esprit* have been somewhat remarkable. Originating in Cincinnati, it was copied, some months since, from our columns into the *British Medical Press*. After a sufficient length of time, it reappeared in Canada, "from one of our transatlantic contemporaries," and has at last reached Chicago. We commend the *Medical Examiner* as a live paper, dealing in the freshest intelligence.

CORRESPONDENCE.

LOUISVILLE, May 6, 1875.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DEAR SIR,—Although it appeared to be your desire for me to report the proceedings of the American Medical Association in regular form, yet I have found so little formal material of general interest and importance, and so much of outside matter, that I beg to offer my account in the shape of a letter.

On Monday evening the Association of the Medical Editors of the United States met in a parlor of the Galt House. The exact aims or advantages of this association are as indefinite as the outlines in a London fog or in the smoke of the Louisville bitumen. On the present occasion, Dr. Edgar, of St. Louis, the President, read an address, which was simply the best thing of the sort I have ever had the pleasure of listening to, and which I hope will be re-echoed by the medical press throughout the length and breadth of the land. The subject of his remarks was medical advertising; not so much the forms of it which are met with in the East, as the far more rank and noxious methods which, it appears, can only be produced upon the rich soil of a comparatively new country.

Nothing that the *Times* has ever said portrays in as dark but true colors the utter hopelessness of the present organization of the profession in this country as does the following sketch which Dr. Edgar drew of the way in which medical schools spring up in a night, like deadly fungi:

"A dozen or fifteen or twenty doctors, more or less, meet and organize themselves into a medical faculty; a charter is procured, and the chairs 'panned out' among them, and circulars scattered thick as blackbirds in autumn, heralding the wonderful advantages of this new school. A card is in all the publications of the city, secular and scientific; thus no means are spared to make known that Prof. A. has the chair of obstetrics, and Prof. B. that of surgery, etc., to the end of the list; then come as many more names (with their addresses) as assistant lecturers, waiting to don the discarded mantles of their superiors. In this way, twenty-five or thirty doctors are advertised into practice over their neighbors, often every way their superiors (except, perhaps, the teacher of chemistry, who has to be paid, as the public have little use for his wares).

"Other professional men, observing the success of this shrewd trick to inveigle the public, and seeing no other way to keep even in the race, organize another school, and the community is startled by the announcement of as many more professors in medicine, born in a day. Thus a city of a hundred thousand inhabitants may boast two, or perhaps three, medical schools, equipped, and in full blast, with large classes, where fifty properly qualified students it might be difficult to find. By 'beating the brush' in all directions, and offering all admission who apply, with or without education, with or without money or price, large classes are collected; and, if the graduating list of either school is not quite

satisfactory (on account of the nine months' short cut), there is generally timber enough at hand, none the worse for having been used, half a dozen or more 'ad eundems' are added, and the bill is filled, the effect upon the public satisfactory, which, of course, is the end sought."

The President of the Association then at length discussed the effects of this practice upon the profession in the United States; but the utter ruin of professional *esprit de corps* and culture, the bitter discords, the vast hordes of uneducated men, which are the necessary fruit of such sowing, need no advertising to be known. Only those who see the results of this system close at hand can, however, appreciate the magnitude of the evil; but the fact that, instead of the dozen schools required to supply the natural demand of the country, there are about one hundred, may give some idea of the necessity for reform. I may mention, *en passant*, that in Cincinnati alone there are six medical schools of various character; that in Louisville a "spring course" enables a man to graduate in nine months (of study?); that in the same city the lectures are practically free, in that a "free scholarship" is offered for every State Senatorial district in the South; and that in Mobile and Charleston the tuition is offered absolutely without cost.

Under the shadow of these institutions the great West is overrun with the men who are rather John the Baptists for the undertaker than the enemies of that necessary evil.

Dr. Edgar may or may not be correct in asserting that at present "the facts are fast becoming known throughout the civilized world, and America is fast becoming the promised land for the quacks and impostors in medicine of the world. The men who fail to pass the Government boards for license, either in Europe or South America, flock to the United States for an open field." But certainly the evil tidings must continually spread more and more, and more and more reap destruction for the unfortunate people of these United States.

It is easy to denounce, but it is harder to prescribe a remedy; and the great merit of Dr. Edgar's address was that he did show most conclusively the true solution of the problem. His diction was so clear and his blows so direct that his very words were golden. After portraying the self-evident fact that the schools and the schoolmen must of necessity be opposed, as a rule, to any reforms in medical education, because such reform must render narrower the entrance to the profession, and must, therefore, wipe out entirely many of the schools, and lessen the value of others as advertising mediums, Dr. Edgar says,—

"Some doctors profess to believe that 'as the masses improve so will the average doctor,' that the supply will meet the demand; than which a greater fallacy was never conceived. Is not the average intelligence of the masses in the United States equal at least to the masses of Europe? Yet the doctors of this country do not compare with those of the European States in general culture or medical acquirements. Let no one deceive

himself; in every country where the doctor stands high, the entrance to the profession is guarded by a State Board, not instituted to protect the doctor against quacks, but to protect the community against incompetent doctors. The practice of medicine and surgery has been so far monopolized in the cities of this country by the schoolmen that every doctor is brought to believe that it is indispensable to a good paying practice to be advertised as a professor in a medical college."

The remedy which Dr. Edgar proposes, and which is evidently the only possible one, is the formation of State Examining Boards; a diploma from which shall be necessary for the practice of medicine in the various States. Your readers will remember that the *Times* has already advocated this plan, but never with the force and persistency it deserves. It would occupy too much of your space to follow Dr. Edgar through the further details of his address, but I would call attention to one fact already hinted at, but which he insists upon and makes very clear,—namely, that the opposition to the formation of State Boards comes from the professors who do so abound. Many of these gentlemen talk about the "needs of poor communities," "vested rights," and what not; tack on to bills amendments seemingly fair, but really fatal in their character, or by various devices seek to maintain the present system,—all of which, coming from men whose interests are at stake, deserves only the answer given by the goat to the fervent public prayer of the hypocrite—Bah! After all, however, the whole profession is not as yet entirely resolved into college faculties, and it is to be hoped that the outside profession will place upon medical teachers the restraining influence of a stern public opinion, and will watch most narrowly the course of that portion of the medical press which is bound hand and foot to the Delilah of school interest, and, if need be, take measures to enlighten the laity, whose dearest interests are at stake, and who must be the final arbiters in the matter.

Singularly diverse from this clear solution of the present problem was the extraordinarily wild and impracticable proposition made by the President of the American Medical Association, in his opening address. He proposed "that it be solemnly resolved by this meeting that it shall be regarded as derogatory to the character of any physician, in any part of the United States, to take under his care, as a student of medicine, any one who cannot exhibit evidence of having taken a degree in a regularly-chartered college, or a certificate of qualifications, necessary to become a student of medicine, from a Board of Examiners appointed for that purpose by the American Medical Association."

A committee was appointed at the last session of the American Medical Association to report "on what legislative action, if any, can be taken to enforce by law an examination of all persons who enter upon the practice of medicine and surgery, by a State Board of Medical Examination," regardless of diplomas; and it is to be hoped that they will show some wisdom in making that report. The only thing the Association can do is to call the attention of the State Societies to the subject of

State Examining Boards, and to urge upon them the necessity for immediate action.

The President's address, on the whole, was a good one. He began by calling attention to the objects for the furtherance of which the Society was first organized. These objects were as follows. *First*, To give emphatic expression to the views and aims of the medical profession in this country. *Second*, To supply more effectual means than have hitherto been available here for cultivating and advancing medical knowledge. *Third*, To elevate the standard of medical education. *Fourth*, To promote the usefulness, honor, and interest of the medical profession. *Fifth*, To enlighten and direct public opinion in regard to the duties, responsibilities, and requirements of medical men. *Sixth*, To excite and encourage emulation and concert of action in the profession. *Seventh*, To facilitate and foster friendly intercourse between medical men. *Eighth*, To take cognizance of the common interest of the medical profession in every part of the United States.

Dr. Bowling then sketched discursively the extent to which these intentions had been carried out, and the difficulties that had been met with. The most interesting part of his address was that which detailed the fierce fight that has been waged between the Association and the medical schools, commencing almost with the infancy of the organization, rising into a great storm at Nashville in 1857, and ending, according to our President, last year, in Detroit, by the expulsion of the representatives of the schools from the Association. It is, however, evident that the battle is not yet over; and it is to be hoped that the Association will never cease its efforts till the heel of the law is placed upon the medical colleges whose unbridled license has been the curse of the profession and the bane of the people.

To expect the address of a President of the American Medical Association not to contain untrue flattery of the American profession is to fly in the teeth of the traditions of the elders; but it would be far better if the truth were told, that, skilful as our practitioners are, yet to the higher thought and knowledge of the world we have contributed almost nothing. Dr. Bowling is not, however, entitled to the least censure for conforming with orthodox usages and maintaining the patriotism of the Cross-Roads, by asserting, "that our own country has, during this period [the century], contributed as much to this development as any other, no unprejudiced observer will dispute." On the whole, considering the circumstances of the occasion, the various public writings of the President, and the many demoralizing examples which exist, Dr. Bowling is entitled to great credit for the moderate and gentlemanly tone of his address.

Yesterday morning Dr. A. H. Daud, General Secretary of the Canadian Medical Association, was presented to the meeting as a representative of the sister body. After his speech of thanks, a tall Texan, with a voice whose stentorian tones hushed all to silence, "declared that he could only wish to Dr. Daud and his people the same good luck which had happened to his

State, namely, to be annexed politically, socially, and professionally to the great American Republic."

The desire was exceedingly well "put," and brought rounds of applause. The humorous Texan is certainly a man of refreshing and most praiseworthy originality. According to his statement before the Obstetric Section, he came to Louisville upon a mission. Japhet was in search of his father, but he was in "search of a pessary for his daughter."

Dr. Gross, by special permission, read an address on "The Lost Arts in Medicine." Dr. Gross shares with Dr. N. S. Davis, of Chicago, the favor of the Association. Indeed, between them they may be said to have a builder's lien upon the organization. The influence which Prof. Gross wields appears to be due largely to his magnificent and richly-deserved surgical reputation; whilst Dr. Davis atones for his lack of this overpowering reputation by his close attention to the Association, his intimate knowledge of its regulations, and the clear-headed manner in which he directs its deliberations. It is stated that he has not missed a meeting for twenty-five years. Dr. Bowling is precluded by his age from actively presiding, and the gentleman who rules for him appears to have but little knowledge of the proper methods of ruling. If it were not for the constant interposition of Dr. Davis, the procedures would seemingly be very chaotic. When Prof. Gross offered to read his address in the general session, no one seemed to have any knowledge of the existence of any by-laws upon the subject; but when some comparatively obscure individual presumptuously essayed to follow in the wake of the great man, it was very instructive to see Dr. Davis, in his ringing, impassive, and implacable tones, call the attention of the meeting to the fact that the by-laws ordered that all volunteer addresses should be referred to their appropriate Sections.

The address of Dr. Gross was really a plea for the use of blood-letting. He reprobated in the strongest terms the present total abandonment of the practice, and entered at length upon the consideration of the causes which have led to it. The peculiar power of Prof. Gross was of course apparent in the address; but when he discoursed most closely upon therapeutic points, the well-known truth that surgeons rarely have clear and just ideas of medical therapeutics was very apparent, and the old saying of *ne sutor ultra crepidam* no doubt flashed across the inner consciousness of many of his auditors. To classify together aconite, digitalis, and veratrum viride is certainly almost to commit the unpardonable therapeutic sin. The proposition which Prof. Gross maintained, that bleeding has been too universally abandoned, is undoubtedly correct, but the assertion of the value of the remedy in such diseases as chronic phthisis, cholera infantum, and "even anæmia," is assuredly at variance with all the established facts of modern pathology and therapeutics.

The learned professor probably had in his mind the fact that exaggeration on the part of an orator is often necessary to bring the audience up to the proper level.

A palpable influence upon medical practice will, we doubt not, be perceptible in the journals of those sections of the West where the name of Gross is almost that of a demi-god. As we heard affirmed by one of the most eminent of the Western practitioners, the address will probably do a great deal of harm, and even cost a good many lives; but if our venerable representative has succeeded by the audacity of his statements in resurrecting venesection, humanity will, probably, be in the long run indebted to him, for the mode of treatment will no doubt soon settle to its true position.

The address of Dr. Austin Flint, upon the "Advances of Practical Medicine," of necessity contained nothing that would be new to the readers of a live journal like the *Times*, but it was a very well-digested, scholarly *résumé* of progress, and, as it was well delivered, riveted the attention of the body.

The only portions of to-day's (May 6) proceedings worthy of notice were the addresses of the chairmen of the Surgical and Obstetrical Sections. Dr. Moore, of Rochester, read an exhausting and exhaustive essay upon "Transfusion." It is a matter of profound wonderment that human nature on the platform is habitually so utterly inappreciative of and tyrannical to human nature on the benches, especially as the benches in the long run usually wreak sufficient vengeance upon the platform. Dr. Moore thoroughly wearied out his auditors, before he came to the interesting portion of his essay, by a long encyclopædic review of the literature of the subject,—a *résumé* which after all was no more complete than various articles which have appeared in the journals. When, however, the doctor did strike the ore-vein, the lead was a rich one. Several interesting cases of transfusion were reported, but offered nothing absolutely new except in the mode of operating. In this, however, it may be that Dr. Moore has made a very decided step in advance. As is often the case, although his theory is unproven, and probably false, its fruits in the efforts to which it has led have been very good.

As is well known, blood exposed to the air coagulates in a very few minutes. Dr. Moore believes that before the blood has been rendered unfit for use by actual coagulation there is a period at which its vitality is enormously impaired. It is, however, well known that blood which has some time previously actually undergone coagulation has been used hundreds of times in transfusion with the best of results. It therefore appears to be a pure assumption that in coagulation the vitality of the blood is lost, and it is much more improbable that before coagulation any change occurs. Moreover, there are two known tests of the life of blood, —*i.e.*, the movements of the white blood-cells, and the power of the red disks to absorb oxygen; and even long after coagulation both white and red corpuscles still give evidences of full functional activity.

The theory of Dr. Moore, true or false, impressed him with the idea that immediate transfusion is the proper method, and that the saving of time during the operation is of the utmost importance, and led him to

adopt the following method. A cylindrical india-rubber bag, about five or six inches long, and capable of holding as many ounces of blood, is to be provided. At its lower extremity it is to be closely attached to one arm of a canula having two arms at right angles to each other; the free arm of the canula is to be inserted into the vein of the receiver, the cephalic vein just above the bend of the elbow being the best, because straightest and allowing most readily the admission and retention of the canula. In inserting the canula, Dr. Moore exposes the vein by an incision about an inch in length, tears away the connective tissue with the blunt end of a coarse sewing-needle, and passes a narrow tape under the vessel. The vein is now clipped with a pair of scissors, according to the method of Nélaton, so as to make a valvular opening, into which the canula is inserted for three-quarters of an inch, and the tape tied around it. The donor and receiver are now placed side by side in such a position that the hand of the latter rests upon the lap of the former, whose arm in turn is extended across and above that of the receiver; an india-rubber funnel having been provided, the vein of the tightly-bandaged arm of the donor is opened by a free incision, and in the first gush which pours into the funnel, whose point is at the bottom of the bag, all the blood that is needed is usually received. Instantly the operator, who stands behind and between the parties, cuts the bandage, claps a compress over the wound, and bends sharply the arm of the donor upon itself. In this way he arrests the hemorrhage instantly, so that the man may stand aside. The operator now stretches upwards the cylindrical bag, previously supported by an assistant in front, doubles the free end shortly on itself, and rolls over and over the fold thus formed along the little bag so as constantly to force the blood into the vein. Dr. Moore insisted especially on the rule of *not compressing* the bag, but of allowing its elasticity to supply the motor power to drive the blood into the vein. He states that he had operated in the method just described successfully in forty-two seconds, and believes that fifty seconds is an abundant time.

The address of Dr. Byford was upon the use of injections of ergotin in uterine fibroid. The essay was a very thorough and creditable one, but contained reports of so many cures at the hands of his Western confrères that a very learned gynaecologist who sat near the writer suggested that some of the results were probably due to the difficulties of diagnosing between phantom tumors, localized peritoneal exudations, and true fibroids. Some of the cases were seen by Dr. Byford himself, and are, therefore, scarcely open to suspicion; but it would require careful consideration from a very able gynaecologist to form a fair judgment upon the value of his evidence. As your correspondent's studies of this branch have been pretty much limited to discovering the best form of a speculum and the best methods of introduction of the same, he consigns Dr. Byford to the tender mercies of that "white-livered Philadelphia grammarian" who in time past was so successful in improving his literary productions.

The address upon State Medicine was to have been read to-day, but the grievous prolixity of Dr. Moore forced the postponement of Dr. Bowditch's address until to-morrow.

The delegates of the Association are now all in, and it is possible to form an opinion as to the *personnel* of this year's meeting. There are nearly five hundred in all, representing the following States and Territories: Alabama, Arkansas, Colorado, Connecticut, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Virginia, Wisconsin.

I believe it is generally conceded that the men are more than usually representative. Boston is especially well represented by such men as Drs. Bowditch and Clark, Dr. Bixby, an old partner of Dr. Storer, and Dr. Chadwick, the secretary of the district medical society; New York has some men of prominence, such as Flint, Sims, Sayre, and Jas. R. Wood; and Philadelphia has a small delegation headed by Gross and Atlee. Probably to the superior character of the delegates are owing the grave decorum and general good feeling which have characterized the deliberations of the Association.

Numerous papers have been read in the various Sections, some of them excellent, many of them feeble, and not a few absolutely puerile. It is bad enough to have gentlemen, who mistake themselves for great luminaries, reflect very glimmeringly but very lengthily the light of ancient text-books, but assuredly some one should hold to a stern reckoning those officers of sections who allow this unmerciful persecution of the members who attend. The law clearly requires that no papers shall be introduced which have not been submitted to the Secretary a month prior to the meeting, and approved of by him after examinations. Loud complaints concerning the Obstetrical Section have especially been made. But, from what I have seen, I do not believe that this Section has been as badly afflicted as some of the others.

The Nominating Committee have selected Philadelphia as the place of meeting next year, and Dr. Sims as President. Drs. Drysdale and Frické, it is whispered, are to replace Drs. Stillé and Murray Cheston on the Publication Committee.

J. Marion Sims was born in Lancaster district, South Carolina, January 25, 1813. He graduated at the University of South Carolina, situated at Columbia, in 1832; subsequently attended medical lectures in Charleston; and in 1835 received the degree of doctor of medicine from the Jefferson Medical College of Philadelphia. Dr. Sims began his professional career with Dr. W. O. Baldwin, of Alabama, in and around Montgomery, they being friendly contemporaries rather than partners or rivals. He acquired a high reputation in the treatment of diseases of the uterus and injuries to females while in Montgomery, and there established a private hospital for females. In 1853 failing health caused Dr.

Sims to leave his Alabama home and locate in New York. Previous to his removal he married a daughter of Dr. B. Rush Jones. His career in New York is well known to the profession. In 1861 he left the United States, and did not return until 1868. During this period he practised medicine in London and in Paris.

The Association has been very handsomely entertained during its stay by various citizens, and Dr. Edward Richardson, Chairman of the Committee of Arrangements, deserves great credit for the manner in which the work has been performed. It is said that the profession at Louisville is very much divided by bitter feuds, but on the surface all has been as placid as a summer day. The Convention does not close until to-morrow, but very many of the delegates have already left the city.

Yours truly,

PONTIFEX MAXIMUS.

PROCEEDINGS OF SOCIETIES.

BIOLOGICAL AND MICROSCOPICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES.

MARCH 1, 1875.

DIRECTOR W. S. W. RUSCHENBERGER, M.D., in the chair.

PRESENT, Messrs. Neill, Morris, Tyson, I. Norris, Holman, Pierce, Seiler, and Richardson.

The minutes of the previous meeting were read and approved.

An interesting article "On the Misinterpretation of Appearances under the Microscope," by Mr. Charles Stodder, of Boston, Mass., Corresponding Member of the Section, was then read by the Secretary. This paper pointed out very clearly certain errors into which a want of care and caution was liable to betray microscopists, and was admirably illustrated by some slides of mounted diatoms (donated by Mr. Stodder to the Section), one of which exhibited several rows of perfect beads, just where transverse striae of two frustules of *Pinnulariae* crossed each other nearly at right angles, thus proving that the beaded appearance, as observed by most of the members present, was merely an optical effect, the result of the passage of light through a transparent refracting medium with curved surfaces. (See p. 519.)

Dr. RICHARDSON remarked that it gave him great pleasure to see so much interest taken in the Section by the corresponding members, especially when this interest was demonstrated by the contributions of such elaborate and instructive papers as that which had just been read.

On motion, the article was referred to a committee composed of Drs. Tyson, Morris, and Richardson.

Dr. J. CHESTON MORRIS exhibited a specimen of Triceratium from Thames mud, which, under the one-inch objective, displayed hexagonal markings with both direct and oblique light, but with a half-inch lens, draw-tube, and high eye-piece, showed, by oblique illumination, small spines on a horizontal plane, demonstrating what Dr. Morris remarked he believed was the true structure of the diatom,—viz., that its surface was studded with minute cones, just as that of *Pleurosigma angulatum* is with bosses. Dr. Morris observed that this specimen he had on exhibition illustrated his remark at the last meeting, that whilst best results were in general to be obtained by central light, in some cases we

failed to perceive certain characteristics without the aid of oblique illumination. It also showed the advantage of "penetration" or "depthing," because with an objective possessing this quality in a low degree, and focussed for a plane in which lay the apices of the cones, we would see only small dots, although by approximating the lens to the object, larger dots, and on still further depression (so as to bring into view the plane on a level with the bases of the spines), a mosaic of hexagons, would become visible.

Dr. RICHARDSON inquired whether Dr. Morris had any evidence that these supposed hexagonal markings were not really optical illusions, produced by the close juxtaposition of circular dots, as pointed out by M. Nachet and exquisitely illustrated by a figure at the end of Dr. Carpenter's last (fifth) edition of "The Microscope and its Revelations."

Dr. MORRIS replied in the negative, and thought it quite possible that the bases of the spines were circular.

Mr. D. S. HOLMAN explained his method of investigating diatoms, etc., by rolling them over and over in the stream of liquid flowing along the narrow channel connecting the two chambers of his improved "Current Slide" (see *Philadelphia Medical Times*, April 5, 1873). Mr. Holman also showed a current slide carrying a fluid containing minute particles of gamboge in active molecular motion, and remarked that this molecular or Brownian movement, supposed by some to be due to external jarring of the instrument, was by this experiment indicated to be the effect neither of surrounding vibrations, nor of electricity, nor of a difference in temperature of the upper and lower enclosing surfaces of glass, but the result of some *inherent power* of the substance.

Dr. JAMES TYSON observed that he had in his cabinet a specimen of gamboge, mounted in fluid three years ago, which showed this curious Brownian motion in perfection for at least two years, at the end of which time he last examined it. He was at a loss to understand how Mr. Holman's experiment proved that the vibratory or jactatory movement, as it was often called, was not due to external influences, which might cause the tremulous motion of molecules of matter in the current, just as the waves of a river might rock a boat, even whilst it floated rapidly along in a swiftly-flowing part of the stream.

Mr. HOLMAN replied that if we shook or jarred the table on which the microscope stood, we could see that the molecules all moved in one direction, just as they did in the current upon his slide, and yet it was perfectly obvious that, besides their forward movement, these minute particles had an independent motion in cycloidal arcs around one another. Mr. H. added that in some of his specimens the Brownian movement had continued uninterruptedly for four years, and, so far as his investigations had gone, there was no substance incapable of exhibiting it; powdered emery, for example, displaying it very satisfactorily indeed.

SELECTIONS.

No. 55. An Act to Regulate the Practice of Medicine, Surgery, and Obstetrics in the Commonwealth of Pennsylvania.

SECTION 1. Be it enacted, etc., That the standard qualifications of a practitioner of medicine, surgery, and obstetrics, or of any one who may attempt to practise, singly or jointly, medicine, surgery, or obstetrics, shall be and consist of the following—namely, a comprehensive and practical knowledge of human anatomy, human physiology, pathology, chemistry, *materia*

medica, obstetrics, practice of medicine and surgery, and public hygiene, and a good moral character.

SECTION 2. The possession of a diploma, regularly issued by a medical school acting under a charter from this or other State or country, shall constitute the sufficient license for the person to whom such diploma is granted, to practise, singly or jointly, medicine, surgery, or obstetrics, as set forth and empowered in said diploma: *Provided, however,* That a diploma that has been or that may hereafter be granted for a money consideration; or other article of value alone, or that has been or may hereafter be granted to any one who has not pursued the usual course of studies required by a legally chartered medical school, shall not be considered as a sufficient qualification under this act.

SECTION 3. Any practitioner who may not have a diploma, as provided for in section two of this act, and who may not be qualified, as hereinafter provided, shall have the privilege of applying to the prothonotary of the court of common pleas of the judicial district in which such applicant resides, for an examination in the branches of medical science and art set forth in section one of this act; whereupon it shall be the duty of such court to appoint a committee or committees, consisting each of three respectable practitioners of medicine of the school of practice recognized in this commonwealth, to which such applicant or applicants may profess to belong, and shall fix the time and place of holding such examination. Each of said applicants, before being admitted to examination, shall deposit with such committee the sum of fifteen dollars (\$15), which money shall be equally divided among them, for which they shall give a receipt; it shall be the duty of such committee or committees to convene at any time upon the call of an applicant or applicants for examination; it shall be the duty of such committee, when the said applicant is found to be qualified, as set forth in section one of this act, to grant to such applicant a certificate, and said certificate shall be the sufficient license for the person to whom it is granted to open an office in this commonwealth for the practice of medicine, surgery, or obstetrics; it shall further be the duty of such committee to appear before the clerk of such court and take an oath or affirmation that they have not taken and will not receive, directly or indirectly, any other compensation for instituting such examination than that which is herein provided.

SECTION 4. Any person who has attended one full course of lectures in any respectable school of medicine recognized by law, and has been a resident practitioner of medicine, surgery, or obstetrics in this commonwealth five years previous to the passage of this act, is hereby authorized to pursue the same. Any person who has been in the continuous practice of medicine, surgery, or obstetrics for ten years in this commonwealth shall be and is hereby authorized to pursue the same.

SECTION 5. Any person who shall attempt to practise medicine or surgery, by opening a transient office within this commonwealth, or who shall, by handbill or other form of written or printed advertisements, assign such transient office or other place to persons seeking medical or surgical advice or prescription, shall, before being allowed to practise as aforesaid, appear before the clerk of the court of quarter sessions of the county wherein said practitioner shall attempt to practise, and shall furnish satisfactory evidence to such clerk that the provisions of this act have been complied with, and shall, in addition, take out a license for one year, and pay into the county treasury, for the use of such county, the sum of two hundred dollars therefor, whereupon it shall be the duty of such clerk to issue to such applicant a proper certificate of license, on payment of the fee of two dollars for his services: *Provided, however,*

That the announcement of name, title, and place of business by card, or announcement of name, title, and place of business in newspaper or other periodical, shall be sanctioned as legitimate, and is so approved by this act.

SECTION 6. Any person violating the provisions of this act shall be deemed guilty of a misdemeanor, and on conviction shall be sentenced to pay a fine not exceeding five hundred dollars, for the use of the county wherein such misdemeanor is committed, or imprisonment not exceeding one year, or both, at the discretion of the court; any person so convicted shall not be entitled to any fee for services rendered, and if fee shall have been paid, the patient, or his or her heirs, may recover the same as debts of like amount are now recoverable by law.

APPROVED—The 12th day of April, A.D. 1875.
J. F. HARTRANFT.

GLEANINGS FROM OUR EXCHANGES.

A GENUINE CENTENARIAN.—Sir Duncan Gibb recently made a post-mortem examination on a woman who died at the well-authenticated age of 112 years. Her various organs were in a wonderfully healthy condition, scarcely any changes being observed, excepting that her heart was enlarged slightly, and there was great decrease in fatty tissue. Her death was said to have been caused by a "cold;" but, beyond slight congestion of the lungs, no disease of the respiratory apparatus was made out.

POISONING BY BICHROMATE OF POTASSIUM.—A photographer, in London, recently drank a quantity of a strong solution of bichromate of potassium, having mistaken the jug for another which contained ale. The physician called in found him very prostrate, sweating profusely, and complaining of severe abdominal pains. He was also slightly purged, the evacuations being of a greenish-yellow color. The pupils were dilated, and the pulse very weak and fluttering. Sulphate of zinc in water was administered two or three times, until vomiting and active purgation had been induced. Subsequently, olive-oil was given him. He remained very weak for some time, and the stomach could only tolerate the mildest food.—*British Medical Journal*.

APPLICATION OF COTTON-WOOL TO THE MEATUS AUDITORIUS.—Mr. G. F. Hodgson writes to the *British Medical Journal*, March 27, combating the statement recently made that cotton-wool is injurious to the ears.

It is true that if cotton-wool be pushed far into an ear whose cutaneous lining is already in a congested or irritable condition, it will, most likely, do more harm than good. The value of cotton-wool, however, when properly employed in cases of otorrhœa and perforated or lost membrana tympani, is beyond price. In England there are hundreds of persons who are daily introducing and wearing these little pledges of cotton-wool pushed home against the remnants of their "drums," not only without the slightest inconvenience but with immense benefit. As a rule, these dossils are not introduced dry, but saturated with plain water, glycerin, oil, or other fluid, according to circumstances; and it is a good plan to remoisten them if they have been in any time.

COPPER IN THE LIVER.—M. Bourneville contributes (*Le Progrès Médical*, No. 32, 1874, *et seq.*) an account of certain observations made at the Salpêtrière concerning epilepsy. In one patient who had been treated by ammoniacal sulphate of copper, careful examination of the liver was made after death, with a view to ascertaining whether this salt is absorbed by the organ in question. From the analysis made, it would appear that

when ammoniacal sulphate of copper has been used in medicinal doses for some time, it may become stored away in the liver in considerable quantities. It follows from this that in medico-legal cases much reason should be exercised in drawing inferences from the presence of copper in the liver.

EXCESSIVE HEMORRHAGE FROM EXCISION OF THE TONSIL CONTROLLED BY ICE-PACKING OF THE THROAT.—Dr. Fauntleroy, of Staunton, Va., reports the following case in the *American Medical Weekly* for April 10. Having removed a very much enlarged tonsil by the usual process of excision with the tonsillotome, after fifteen or twenty minutes the wound commenced to bleed profusely. Solution of Monsel's salt and gargling with iced solution of common salt failed to check the hemorrhage, and Dr. F. finally had recourse to the ice-pack, applied behind the angle of the jaw and along the line of the cervical blood-vessels. This application was continued for more than an hour, the hemorrhage decreasing gradually during that time, and finally ceasing entirely.

INFLUENCE OF MATERNAL IMPRESSIONS ON THE FETUS.—F. Ormrod writes to the *Lancet*, March 13, an account of a woman who had her right hand trapped by the slamming of a door during the early period of utero-gestation. She was delivered in due time of a female child, normal in every respect excepting the fingers of the right hand, which were arrested in development. At the present time the child is over two years of age. The thumb and palm of the hand are quite natural; but the fingers measure only about half an inch in length, and are apparently without bones.

ACUTE GLOSSITIS IN SCARLATINA.—An instance of this extremely rare complication has lately been published by Dr. William Moore, of Dublin. It occurred in a young gentleman aged 18, and was the only example Dr. Moore had ever seen in this disease. He strongly advocates the treatment by iron and stimulants, when this complication takes place. A somewhat similar case has been described as occurring in the practice of Dr. Banks, but the complication is unusual.

TRICHINA.—Dr. Van Petri, of Rostock, has examined all the swine slaughtered in that town during the year 1874, for the purpose of ascertaining how many of these animals were infested by trichinæ. Out of 6731 thus examined, only two proved to contain these parasites.—*Virchow's Archiv*, February 15.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM MAY 4, 1875, TO MAY 10, 1875, INCLUSIVE.

KERNEY, C. C., SURGEON.—During the absence of the Medical Director of the Department, to perform his duties. S. O. 40, Department of California, April 29, 1875.

BAILY, J. C., SURGEON.—Assigned to duty at the Post of Columbia, S. C. S. O. 59, Department of the South, May 6, 1875.

FRANTZ, J. H., SURGEON.—Relieved from duty at Columbia, S. C., and to comply with S. O. 73, c. s., A. G. O. S. O. 59, c. s., Department of the South.

GIBSON, J. R., ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon De Witt, to comply with S. O. 73, c. s., A. G. O.

DE WITT, C., ASSISTANT-SURGEON.—Assigned to duty at Charleston, S. C. S. O. 59, c. s., Department of the South.

WEISEL, D., ASSISTANT-SURGEON.—Granted leave of absence for one month. S. O. 56, Department of the South, May 1, 1875.

FINLEY, J. A., ASSISTANT-SURGEON.—Assigned to duty at the Cantonment on the North Fork of Red River, Texas. S. O. 67, Department of the Missouri, May 5, 1875.

DE LOFFRE, A. A., ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon Finlay, assigned to duty at Fort Larned, Kansas. S. O. 67, c. s., Department of the Missouri.

MAUS, L. M., ASSISTANT-SURGEON.—Assigned to duty at Frankfort, Kentucky. S. O. 59, c. s., Department of the South.